

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001393**Date Inspected:** 19-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Xu Le Feng, Ye Yong Jun, Sha Zi Cui, Wu Presiding			CWI Presenting	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** Tower Mock-ups and OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

Tower Fabrication Facility**89M Mock-up Assembly**

The Quality Assurance Inspector observed ZPMC welding operator Bu Heng Hua, welder identification number, 03777P, performing in process welding of a angle bracket lug to diaphragm plate connection. Quality Control Inspector Ye Yong Jun was monitoring the welder. The welder was using the shielded metal arc welding process to produce the fillet weld in the horizontal position. The Quality Assurance Inspector measured the welding parameters at Mr. Bu's station and found the parameters to meet the minimum requirements of welding procedure specification WPS-B-T-41123. The Quality Assurance Inspector measured the amperage at approximately 170. The Quality Assurance Inspector witnessed Quality Control measuring the interpass temperature using a calibrated inferred temperature gun.

The Quality Assurance Inspector observed 2 two ZPMC personnel performing back gouging operations to Skins D and E. The workers were using the air carbon arc process and grinder to produce the excavation.

Diaphragm Plate Cutting

The Quality Assurance Inspector observed ZPMC performing cutting operations on there cutting table. ZPMC Quality Control relayed they were utilizing a natural gas and oxygen mix. The diaphragm plate appeared to be a

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

type 1 diaphragm plate.

Bay 1

The Quality Assurance Inspector observed three ZPMC personnel performing grinding operations of tack welds in preparation of welding the closed rib to base plate partial joint penetration weld. The assembly was marked with a "P" for in house practice assembly.

Bay 2

Diaphragm Plate Cutting

The Quality Assurance Inspector observed ZPMC performing cutting operations on there cutting table. The diaphragm plate appeared to be a type 3 diaphragm plate.

114M Mock-up Upper and Lower Shaft Assembly

The Quality Assurance Inspector observed magnetic particle technician Lai Xin Xin performing magnetic particle testing to the corner stiffeners partial joint penetration weld. In addition Mr. Lai tested the runoff area of the complete joint penetration welds on skins A and B. Mr. Lai marked the area for repair and it was immediately removed by the grinding process. Mr. Lai reexamined the area and relayed the indication was no longer present. Below is a digital photograph illustrating the magnetic particle examination in progress.

77M Mock-up Assembly

The Quality Assurance Inspector observed ZPMC personnel performing fit-up operations of a corner stiffener. The fit-up is in progress at this time.

Bay 3

The Quality Assurance Inspector observed ZPMC performing heat straightening operations to a side plate identified as SP-017. The Quality Assurance Inspector observed ZPMC Quality Control monitoring the heat using a calibrated infrared temperature indicating gun.

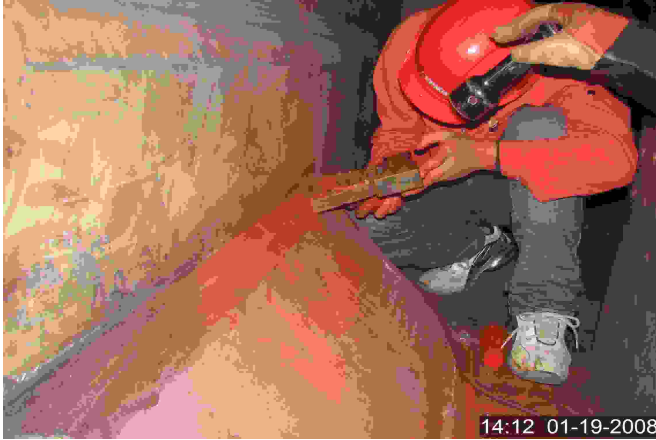
The Quality Assurance Inspector observed three ZPMC personnel performing tack welding operations of stiffener to bottom plate connections.

Bay 7

The Quality Assurance Inspector observed no ZPMC personnel observed working in Bay 7.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman,Greg	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
